Application Serial No. 10/822,507 Amendment and Response

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-70. (Canceled)
- 71. (Currently Amended) A <u>scaled process</u> for treating a diluted tailings component, comprising heated water, particulate mineral solids, <u>precipitated asphaltenes</u> and residual bitumen and solvent, said component having been derived from bitumen froth by dilution and mixing of the bitumen froth with solvent and separation of the resulting diluted bitumen froth into a diluted bitumen component and said diluted tailings component, comprising:

first subjecting the whole diluted tailings component to a solvent recovery separation by pressure moderation to recover substantially all of the solvent in the diluted tailings component as a separate recovered solvent component and produce a solvent recovered tailings component containing water, and solids, precipitated asphaltenes and residual bitumen and solvent; and

second subjecting the solvent recovered tailings component to gravity separation to separately produce an overflow stream of clarified heated water and an underflow stream mainly comprising solids, precipitated asphaltenes and water; and

recycling at least part of the clarified heated water for re-use in the process.

- 72. (Currently Amended) The process as set forth in claim 71 emprising:

 recycling at least part of the clarified heated water for re-use in the process wherein the process is sealed and wherein the at least part of the clarified heated water is not subjected to solvent recovery by distillation after the second subjecting step and before the recycling step.
- 73. (Previously Presented) The process as set forth in claim 71, comprising: subjecting the solvent recovered tailings component to a combination of gravity separation and gas flotation to separately produce the overflow and underflow streams and a third stream comprising residual bitumen and residual solvent.

(Previously Presented) The process as set forth in claim 71, wherein:

the diluted tailings component is subjected in series to separate first and second stages of solvent recovery separation so that each stage produces separate overflow and underflow streams of recovered solvent component and solvent recovered tailings component; and

a first part of the first stage underflow is pumped as feed to the second stage and a second part of the first stage underflow is pumped back to the first stage to agitate diluted tailings component undergoing separation in the first stage.

- 75. (Previously Presented) The process as set forth in claim 74 wherein:
- a first part of the second stage underflow is fed as feed to gravity separation and a second part of the second stage underflow is pumped back to the second stage to agitate diluted tailings component undergoing separation in the second stage.
 - 76. (Previously Presented) The process as set forth in claim 71, further comprising: recycling at least part of the clarified heated water to solvent recovery separation.
- (Previously Presented) The process as set forth in claim 73, further comprising: sparging air into the solvent recovered tailings component to enable gas flotation of residual bitumen and residual solvent.
- 78. (Previously Presented) The process as set forth in claim 72, comprising: subjecting the solvent recovered tailings component to a combination of gravity separation and gas flotation to separately produce the overflow and underflow streams and a third stream comprising residual bitumen and residual solvent.
- 79. (Previously Presented) The process as set forth in claim 72, wherein: the diluted tailings component is subjected in series to separate first and second stages of solvent recovery separation so that each stage produces separate overflow and underflow streams of recovered solvent component and solvent recovered tailings component; and

- a first part of the first stage underflow is pumped as feed to the second stage and a second part of the first stage underflow is pumped back to the first stage to agitate diluted tailings component undergoing separation in the first stage.
- 80. (Previously Presented) The process as set forth in claim 73, wherein: the diluted tailings component is subjected in series to separate first and second stages of solvent recovery separation so that each stage produces separate overflow and underflow streams of recovered solvent component and solvent recovered tailings component; and
- a first part of the first stage underflow is pumped as feed to the second stage and a second part of the first stage underflow is pumped back to the first stage to agitate diluted tailings component undergoing separation in the first stage.
 - 81. (Previously Presented) The process as set forth in claim 73, further comprising: recycling at least part of the clarified heated water to solvent recovery separation.
 - 82. (Previously Presented) The process as set forth in claim 74, further comprising: recycling at least part of the clarified heated water to solvent recovery separation.
 - 83. (Previously Presented) The process as set forth in claim 75, further comprising: recycling at least part of the clarified heated water to solvent recovery separation.
- 84. (Previously Presented) The process as set forth in claim 74, further comprising: sparging air into the solvent recovered tailings component to enable gas flotation of residual bitumen and residual solvent.
- (Previously Presented) The process as set forth in claim 75, further comprising: sparging air into the solvent recovered tailings component to enable gas flotation of residual bitumen and residual solvent.
- (New) A process for treating a diluted tailings component, comprising heated water, particulate mineral solids, precipitated asphaltenes and residual bitumen and solvent, said

component having been derived from bitumen froth by dilution and mixing of the bitumen froth with solvent and separation of the resulting diluted bitumen froth into a diluted bitumen component and said diluted tailings component, comprising:

subjecting at least most of the diluted tailings component to a solvent recovery separation to recover substantially all of the solvent in the diluted tailings component as a separate recovered solvent component and produce a solvent recovered tailings component containing water, solids, precipitated asphaltenes and residual bitumen and solvent; and

thereafter subjecting the solvent recovered tailings component to gravity separation to separately produce an overflow stream of clarified heated water and an underflow stream mainly comprising solids, precipitated asphaltenes and water, the underflow stream comprising most of any residual solvent, solids, and precipitated asphaltenes in the solvent recovered tailings component.

- 87. (New) The method of claim 86, wherein the clarified heat water is recycled for reuse in the process and wherein the solvent recovered tailings component and underflow stream are free of distillation.
- (New) The method of claim 86, wherein the subjecting step is performed by pressure moderation.
 - 89. (New) A method, comprising:
- (a) separating an oil sand slurry into first, second, and third product streams, the first product stream comprising most of the bitumen and asphaltenes in the oil sand slurry, and fine solid material, the second product stream comprising fine solid material, and bitumen and asphaltenes, and the third product stream comprising coarse solid material;
 - (b) contacting the first product stream with a diluent solvent to form a mixture;
- (c) thereafter separating the first product stream and diluent solvent mixture into a diluted bitumen component comprising substantially all of the bitumen and diluent solvent in the mixture and a diluted tailings component comprising the fine solid material, bitumen, precipitated asphaltenes, and diluent solvent:

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- (d) recovering substantially all of the diluent solvent from the diluted bitumen component;
- (e) subjecting at least most of the diluted tailings component to a solvent recovery separation to recover substantially all of the solvent in the diluted tailings component as a separate recovered solvent component and produce a solvent recovered tailings component containing water, solids, precipitated asphaltenes and residual bitumen and solvent; and
- (f) after step (e), subjecting the solvent recovered tailings component to gravity separation to separately produce an overflow stream of clarified heated water and an underflow stream mainly comprising solids, precipitated asphaltenes and water, the underflow stream comprising most of any residual solvent, solids, and precipitated asphaltenes in the solvent recovered tailings component.